State Water Resources Control Board
Meeting July 10, 2018
Agenda Item #4

Consideration to Approve Basin Plan Amendment to Establish a Region-wide Process for Evaluating the Municipal and Domestic Supply (MUN) Beneficial Use in Agriculturally Dominated Surface Water Bodies

Anne Littlejohn
Sr. Environmental Scientist

Presentation Overview

I. Amendment Summary

II. Public Comments and Responses

III. Staff Recommendation

Amendment Summary

Goal: **Consistent - Transparent – Streamlined** process for appropriate application and level of protection of MUN in Ag dominated surface water bodies

Background

Incorporation of the "*Sources of Drinking Water Policy*" into Basin Plans

- Primary and Secondary MCLs - Overly-conservative
- Limits water reuse and conservation

Background

- *Sources of Drinking Water Policy* Exception 2b
  - Convey or hold Ag Drainage
  - Monitoring to assure compliance
- Exceptions require a Basin Plan Amendment

Background

- Typical Basin Plan Amendment Process =

  3-5 years

- 6,000+ Ag water bodies
- Need standardized process

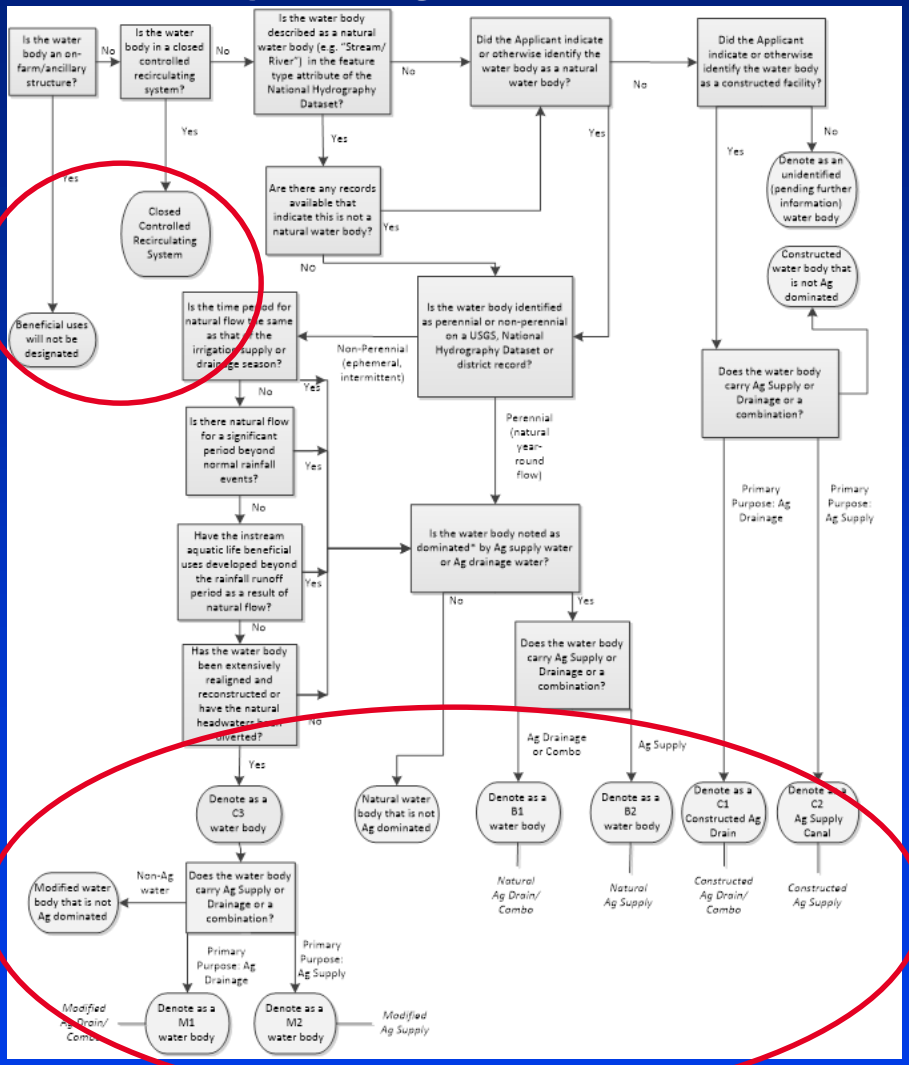
Amendment Summary

Establish a Standardized Region-wide Evaluation Process

- Water Body Categorization
- Appropriate MUN and associated WQOs
  - Development of Limited MUN (LMUN)
- Implementation
- Monitoring/Surveillance
- Case Study – San Luis Canal Company

Amendment Summary

Water Body Categorization Flow Chart

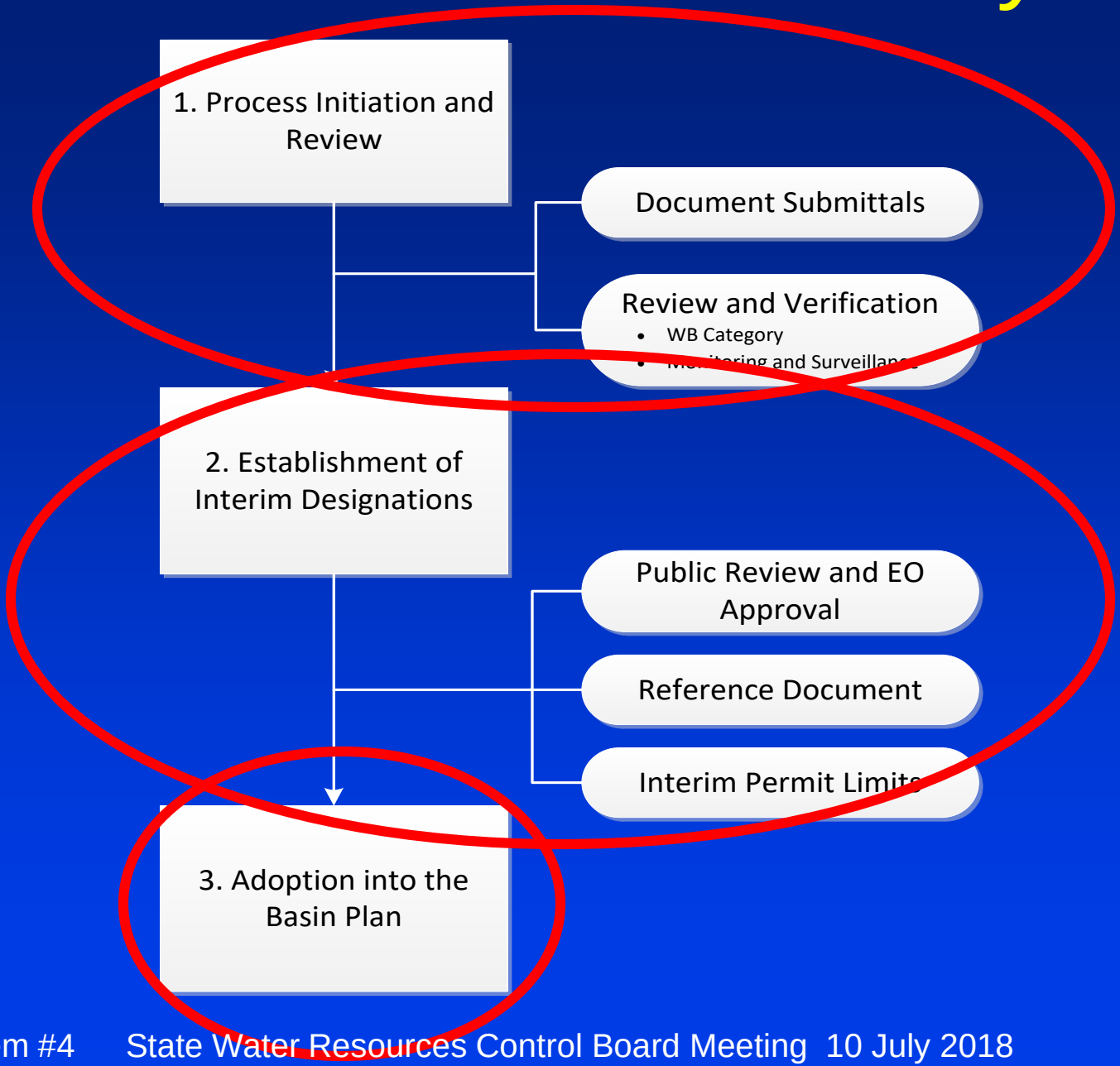


Amendment Summary

Assigned MUN Beneficial Use Designations

Water Body Category	MUN Beneficial Use
C1 (Constructed Ag Drainage/Combo)	No MUN
M1 (Modified Ag Drainage/Combo)	No MUN
C2 (Constructed Ag Supply)	LIMITED-MUN
M2 (Modified Ag Supply)	LIMITED-MUN
B1 (Natural Ag Drainage/Combo)	LIMITED-MUN
B2 (Natural Ag Supply)	LIMITED-MUN
Closed Controlled Recirculating Systems	
Year-Round Closed	No MUN
Seasonally Closed	No MUN during closure period

Amendment Summary



Amendment Summary

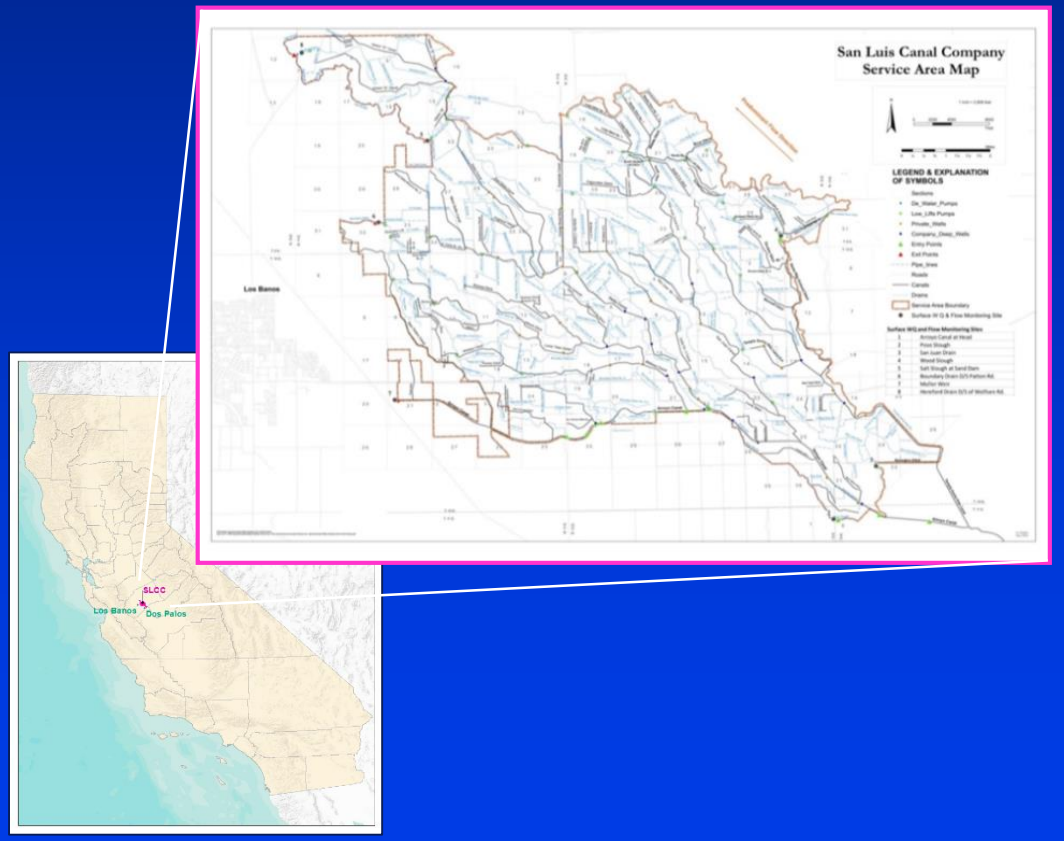
- Monitoring Requirements
  - Sources of Drinking Water Policy
  - State Antidegradation Policy
- Case-by-Case Assessments
  - Comprehensive Monitoring Reference Guides
  - WQ Reports (e.g. Integrated Reports, Watershed Sanitary Surveys)



Amendment Summary
SLCC Case Study

Applied evaluation process to San Luis Canal Company

- De-designate MUN in 231 constructed or modified Ag dominated water bodies
  - None used for MUN
  - Convey Ag drainage
  - Meet Exception 2B



Public Written Comments

Comment Period: Sept. 28 – Nov. 13, 2017

Supportive Comments:

- Kern River Watershed Coalition Authority
- Minasian, Meith, Soares, Sexton & Cooper, LLP

Critical Comments:

- Alameda County Flood Control, Zone 7, Contra Costa Water District
- Environmental Law Foundation et al.

Response To Comments

Comment #1:

Process is insufficient to ensure adequate monitoring of discharges from de-designated or LMUN water bodies

Response:

- Case-by-case monitoring assessments & recommendations
  - Comprehensive Monitoring Guides
  - Evaluation of constituents of concern & data gaps
- Title 22 source water monitoring every 3-5 years

Response To Comments

Comment #2:

Insufficient review of potential cumulative impacts to downstream MUN water bodies and no long term protection

Response:

- Ag management practice improvements have not been driven by MUN designations in ag drains & supply channels
- No significant change to water quality expected
- Antidegradation analyses will continue to be required
- Monitoring focused on ensuring downstream MUN protection

Response To Comments

Comment #3:

Inconsistent with the *Sources of Drinking Water Policy* (Resolution 88-63)

- Exception 2b is applied to water bodies that hold a combination of Ag supply and drainage
- Water bodies that do not meet the exceptions are designated LMUN

Response:

- Exception 2b – primary purpose of conveying/holding Ag drainage
- Board is not removing the MUN use, but recognizes that LMUN is a limited potential MUN source.

Response To Comments

Comment #4:

The LMUN definition is too vague and water quality objective simply reiterates existing requirements

Response:

- Limited potential as a source of MUN
- Water quality and downstream beneficial uses will be protected consistent with the *State Antidegradation Policy*
  - requires specific findings before any degradation is allowed

Response To Comments

Comment #5:

Do not agree with the rationale for no peer review

Response:

- Process does not contain new science
- Relies on policy determinations, existing information and language in current policies.

Response To Comments

Comment #6:

Board did not fully assess potential impacts to groundwater

Response:

- Water quality will largely mirror existing water quality within agricultural network
- Groundwater beneficial uses will remain intact
- ILRP expanding to regulate discharges to GW

Staff Recommendation

1. Approve Resolution to Amend Sacramento River and San Joaquin River and Tulare Lake Basin Plans

2. Authorize submittal to the Office of Administrative Law as approved

3. Authorize submittal to the U.S. Environmental Protection Agency for approval

Questions/Comments?

Extra Slides

Definition
"Ag Dominated"

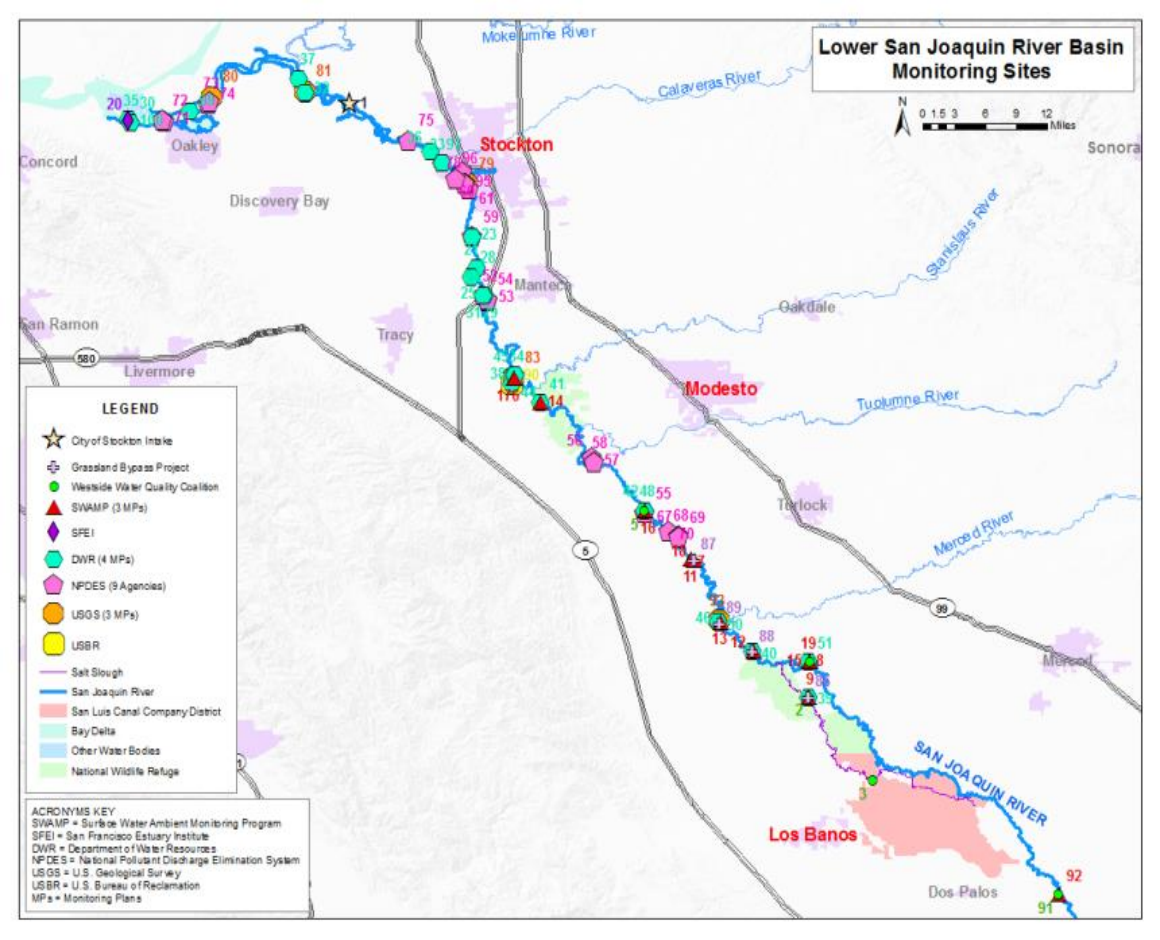
Ag dominated is defined as systems designed or modified for the primary purpose of conveying or holding water used for or resulting from agricultural production, and/or water bodies with greater than 50% of the flow dependent on agricultural operations for greater than 50% of the irrigation season.

ISWP Summary Table

Drainage Area	# Agency Reports	Category (b)		Category (c)	
		#	Miles	#	Miles
Sacramento	93	68	541	2485	5160
San Joaquin	63	46	538	1715	4689
Delta	70	13	126	789	1548
Tulare Lake	109	28	268	1068	6460
Foothills	24	5	39	234	661
Area Subtotal:	359	160	1512	6291	18519
Major Waterways	5	0	0	28	1293
Total:	**364**	**160**	**1512**	**6319**	**19812**

- Coordinated information from water agencies
- Defined Drainage Basins & Identified Categories of Water bodies
- Over 350 Reports covering 90% of Central Valley irrigated agriculture

SLCC Example



Developed Comprehensive Monitoring Guide for the Lower San Joaquin River

- Identified Constituents of Concern
- 15 Monitoring Programs
- ~ 65 Different Monitoring Sites

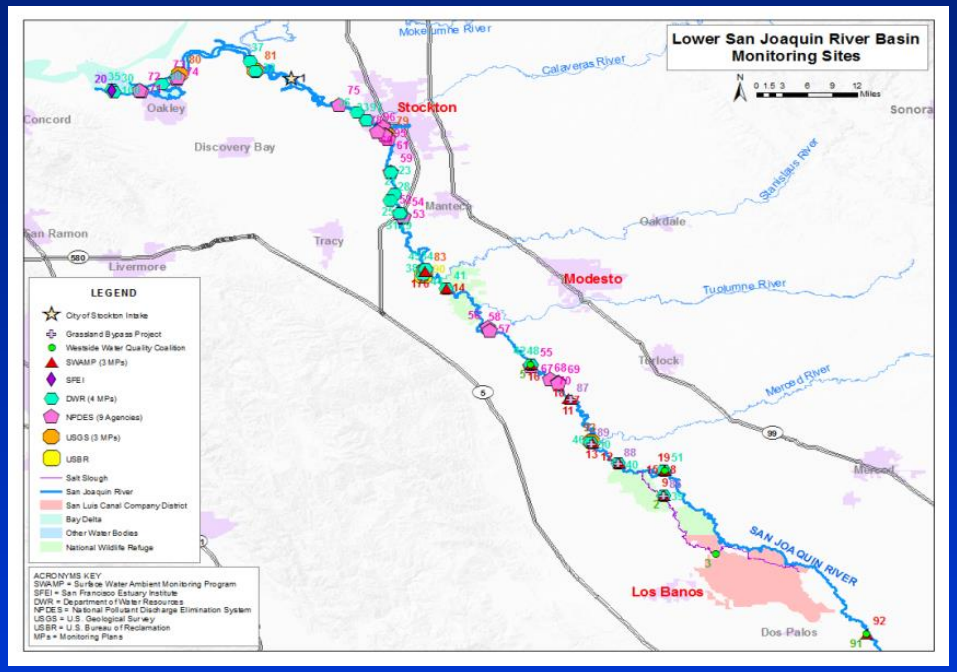
SLCC Example

- Extensive monitoring by many agencies downstream to the Delta
  - ✓ ILRP
  - ✓ NPDES
  - ✓ SWAMP
  - ✓ Municipal Water Quality Investigations (MWQI)
  - ✓ USGS
  - ✓ State Water Board Division of Drinking Water Source Water Monitoring

- Regular monitoring of a wide variety of constituents

➢ Recommended Monitoring Option: Continue Existing Regulatory Monitoring

Comprehensive Monitoring Guides



Data sources: Applicant, NPDES, ILRP, SWAMP, DDW and outside entities.

Updated every 3 to 5 years

Comprehensive Monitoring Guides

SITE INFORMATION					FIELD							
Site Name												
Agency	Program	Monitoring Plan	Site ID	Project Term	Flow (cfs)	EC	DO	pH	Temp	Turbidity	Alkalinity	UV (ABS 254 NM)
SJR at Bowman Rd., 8.0 miles S of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-001	Ongoing	BM	W/BM	W	W/BM	W/BM	W		
SJR at Brandt Bridge												
DWR	Continuous Recording Station	Continuous Recording Station	BDT	Ongoing	C	C	C	C	C	C		
SJR at Hwy 4, 0.5 miles S of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-002	Ongoing		W	W	W	W	W		
SJR at Garwood Bridge												
USGS	Delta Flows Network	Delta Flows Network	11304810		C							
DWR	Continuous Recording Station	Continuous Recording Station	SJG	Ongoing	C	C			C	C		
SJR, US of the East Complex retention basin discharge, and S of the Santa Fe Railroad Bridge												
Stockton Port District Facility	NPDES	NPDES SMP	R-1	Ongoing		O	O	O	O	O		
SJR, Flow Monitoring Station location approx. 500 ft. S of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-001A	Ongoing	C							
SJR at Burns Cutoff, 0.5 miles N of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-002A	Ongoing		W	W	W	W	W		
SJR at Deep Water Channel, 1.5 miles N of Discharge Point 001												
City of Stockton Regional WWCF	NPDES	NPDES SMP	RSW-003	Ongoing		W	W	W	W	W		
SJR at Rough and Ready Island												
DWR	IEP	EMP: Real Time Monitoring	P8A	Ongoing	C	C	C	C	C	C		

Monitoring and Surveillance

- Case-By-Case Monitoring Program Options
  - Interim monitoring recommendations
  - No unreasonable impacts downstream
- Monitoring Duration
- Discharger Responsibility
  - New or changing discharges
- Water Board Commitment
  - Coordination to augment data

Environmental and Economic Analyses

- CEQA/Environmental and Antidegradation Analyses

Resource Categories	Level of Impact
Water Quality, Biological Resources, and Utilities and Services	Less than significant impact
All other categories	No significant impact

  - Consistent with State and Federal Antidegradation Policies
- Economic Analysis
  - Implementation is not expected to result in substantial economic effects